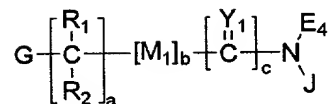


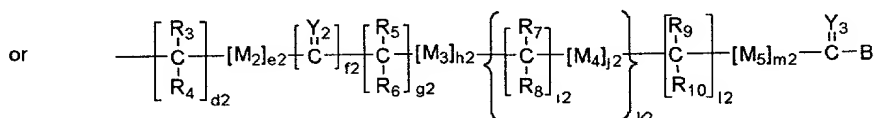
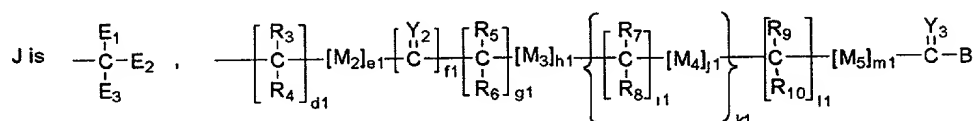
WE CLAIM:

1. A compound comprising the formula:

(I)



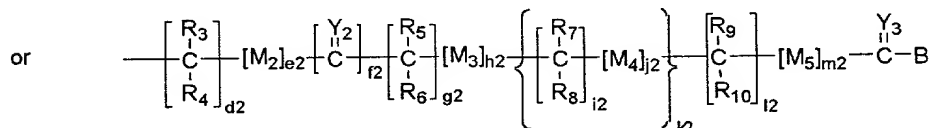
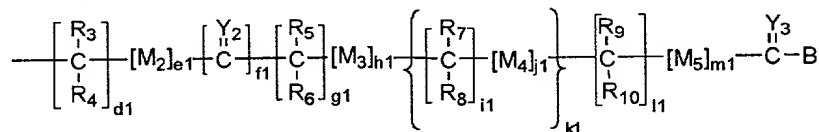
5 wherein:



10

E_{1-4} are independently selected from the group consisting of hydrogen, C_{1-6} alkyls, C_{3-12} branched alkyls, C_{3-8} cycloalkyls, C_{1-6} substituted alkyls, C_{3-8} substituted cycloalkyls, aryls, substituted aryls, aralkyls, C_{1-6} heteroalkyls, substituted C_{1-6} heteroalkyls, C_{1-6} alkoxy, phenoxy, C_{1-6} heteroalkoxy,

15



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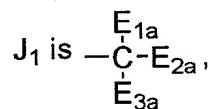
and at least one of E_{1-4} includes a B moiety;

B is a leaving group, OH, a residue of a hydroxyl-containing moiety, a residue of an amine-containing moiety or



25

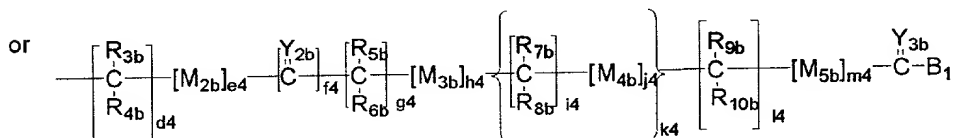
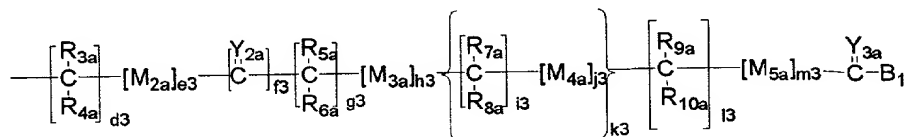
wherein E_5 is independently selected from the same group which defines

 E_{1-4} ;

30

E_{1a-3a} are independently selected from the group consisting of hydrogen, C_{1-6} alkyls,

C₃₋₁₂ branched alkyls, C₃₋₈ cycloalkyls, C₁₋₆ substituted alkyls, C₃₋₈ substituted cycloalkyls, aryls, substituted aryls, aralkyls, C₁₋₆ heteroalkyls, substituted C₁₋₆ heteroalkyls, C₁₋₆ alkoxy, phenoxy, C₁₋₆ heteroalkoxy,

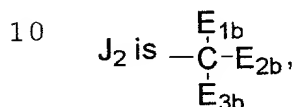


- 5 wherein B₁ is a leaving group, OH, a residue of a hydroxyl-containing moiety or a residue of an amine-containing moiety or



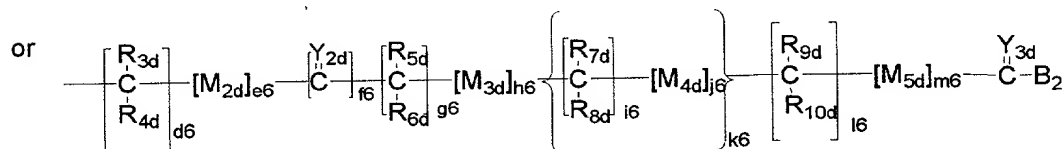
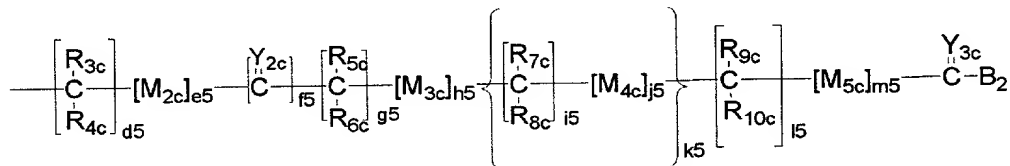
wherein E₆ is independently selected from the same group which defines

E₁₋₄;



wherein E_{1b-3b} are independently selected from the group consisting of hydrogen, C₁₋₆ alkyls, C₃₋₁₂ branched alkyls, C₃₋₈ cycloalkyls, C₁₋₆ substituted alkyls, C₃₋₈ substituted cycloalkyls, aryls, substituted aryls, aralkyls, C₁₋₆ heteroalkyls, substituted C₁₋₆ heteroalkyls, C₁₋₆ alkoxy, phenoxy, C₁₋₆ heteroalkoxy,

- 15



wherein B₂ is a leaving group, OH, a residue of a hydroxyl-containing moiety or a residue of an amine-containing moiety;

G is a polymeric residue;

Y₁₋₃, Y_{2a-d} and Y_{3a-d} are each independently O, S or NR_{11a}

5 M₁₋₄, M_{2a-2d}, M_{3a-3d}, and M_{4a-4d} are each independently O, S or NR_{11b};

M₅ and M_{5a-d} are each independently X or Q,

wherein X is an electron withdrawing group and Q is a moiety containing a free electron pair positioned three to six atoms from C(=Y₃) or C(=Y_{3a-d});

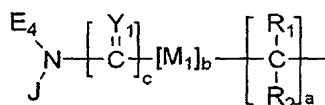
10 R₁₋₁₀, R_{1a-11a}, R_{1b-11b}, R_{1c-10c} and R_{1d-10d} are each independently selected from the group consisting of hydrogen, C₁₋₆ alkyls, C₃₋₁₂ branched alkyls, C₃₋₈ cycloalkyls, C₁₋₆ substituted alkyls, C₃₋₈ substituted cycloalkyls, aryls, substituted aryls, aralkyls, C₁₋₆ heteroalkyls, substituted C₁₋₆ heteroalkyls, C₁₋₆ alkoxy, phenoxy and C₁₋₆ heteroalkoxy; and

15 a, b, c, d1- d6, e1-e6, f1-f6, g1- g6, h1- h6, i1- i6, j1- j6, k1- k6, l1- l6, m1- m6 are each independently zero or a positive integer.

2. The compound of claim 1, wherein G further comprises a capping group A, which is selected from the group consisting of hydrogen, CO₂H, C₁₋₆ alkyl moieties, and

20

(I')

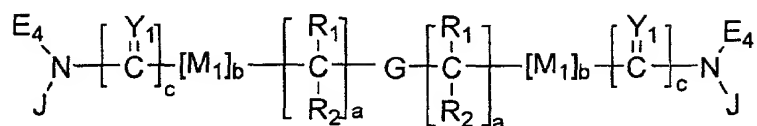


wherein a, b, c, R₁₋₂, M₁, Y₁, E₄ and J are the same as set forth in claim 1.

25

30

3. A compound of claim 2, of the formula:



5

4. The compound of claim 1, where *a*, *b*, *c*, *d1-d6*, *e1-e6*, *f1-f6*, *g1-g6*, *h1-h6*, *i1-i6*, *j1-j6*, *k1-k6*, *l1-l6*, *m1-m6* are independently zero, one or two.

5. The compound of claim 1, wherein *R*₁ and *R*₂ are both H, *a* and *c* are one, *Y*₁ is O and both *E*₁ and *E*₄ are H.

10

6. The compound of claim 1, wherein *G* is polyalkylene oxide residue.

7. The compound of claim 6, wherein *G* is a polyethylene glycol residue.

15

8. The compound of claim 1, wherein *G* is -O-(CH₂CH₂O)_x or -O-(CH(CH₃)CH₂O)_x,
wherein *x* is the degree of polymerization.

20

9. The compound of claim 8, wherein *G* is -O-(CH₂CH₂O)_x and *x* is a positive integer so that the weight average molecular weight is at least about 20,000.

10. The compound of claim 9, wherein *G* has a weight average molecular weight of from about 20,000 to about 100,000.

25

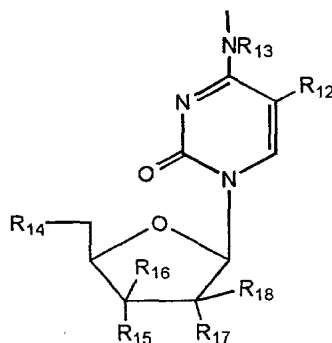
11. The compound of claim 10, wherein *G* has a weight average molecular weight of from about 25,000 to about 60,000.

12. The compound of claim 1, wherein B is a residue of an amine - containing moiety.

13. The compound of claim 12, wherein said amine-containing moiety is

5

10



wherein

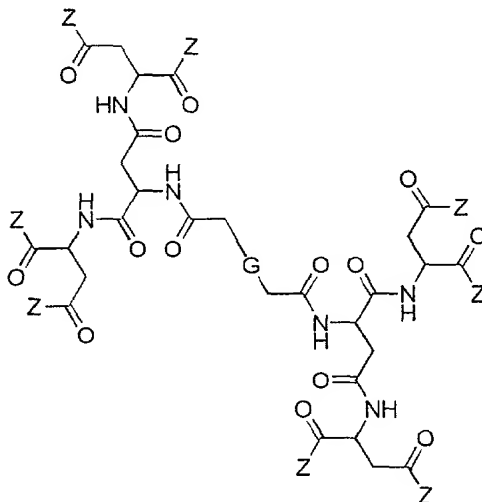
R₁₂₋₁₃ are independently selected from the group consisting of hydrogen, C₁₋₆ alkyls, C₃₋₁₂ branched alkyls, C₃₋₈ cycloalkyls, C₁₋₆ substituted alkyls, C₃₋₈ substituted cycloalkyls, aryls, halo, substituted aryls, aralkyls, C₁₋₆ heteroalkyls, substituted C₁₋₆ heteroalkyls;

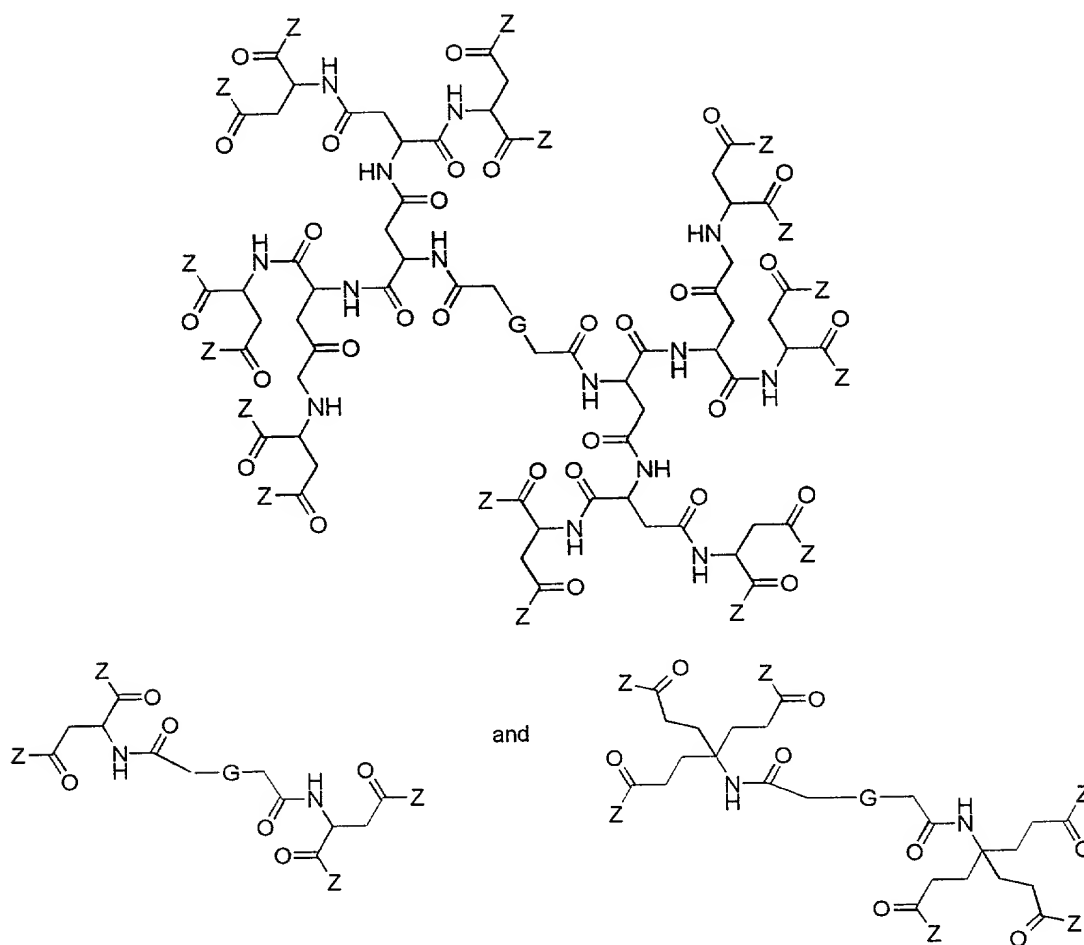
15

R₁₄₋₁₈ are independently selected from alkoxy, e.g. OR₁₉ or, in the alternative, H, OH, N₃, NHR₂₀, NO₂ or CN, fluoro, chloro, bromo, iodo, where R₁₉₋₂₀ are independently selected from the same group which defines R₁₂₋₁₃.

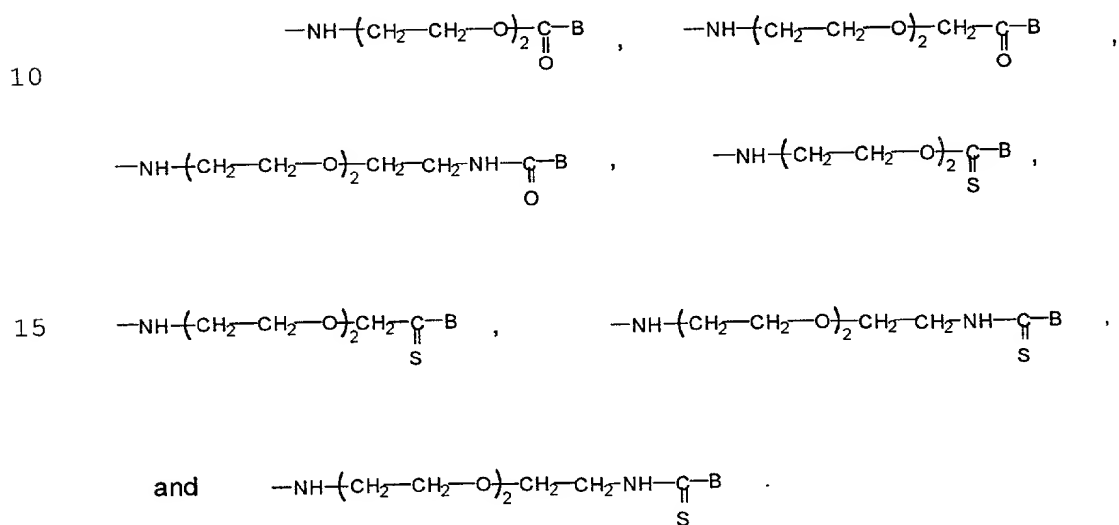
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14. A compound of claim 3, selected from the group consisting of:



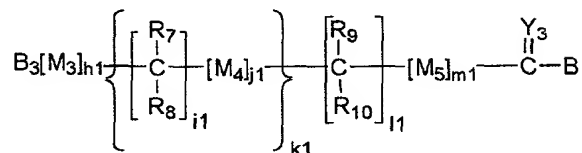


wherein Z is one of:



15. A method of preparing a polymeric transport system, comprising

a) reacting compound of the formula:



wherein

B is a residue of a biologically active amine-containing moiety or a hydroxyl-containing moiety;

B₃ is a cleavable protecting group;

Y₃ is O, S, or NR_{11a};

M₃ and M₄ are independently O, S, or NR_{11b},

M₅ is X or Q;

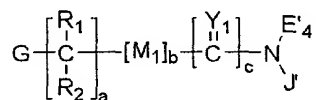
wherein X is an electron withdrawing group and Q is a moiety containing a free electron pair positioned three to six atoms from C(=Y₃);

R₇₋₁₀ and R_{11a-b} are independently selected from the group consisting of hydrogen, C₁₋₆ alkyls, C₃₋₁₂ branched alkyls, C₃₋₈ cycloalkyls, C₁₋₆ substituted alkyls, C₃₋₈ substituted cycloalkyls, aryls, substituted aryls, aralkyls, C₁₋₆ heteroalkyls and substituted C₁₋₆ heteroalkyls;

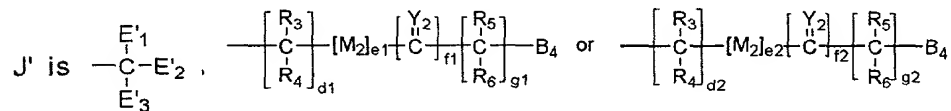
h1-m1 are each independently zero or a positive integer;

b) cleaving the cleavable protecting group B₃; and

c) reacting the resultant compound with a compound of the formula

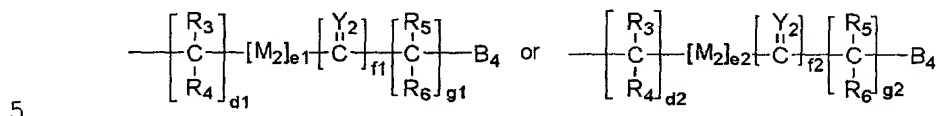


wherein



E'₁₋₄ are independently selected from the group consisting of hydrogen, C₁₋₆ alkyls, C₃₋₁₂ branched alkyls, C₃₋₈ cycloalkyls, C₁₋₆ substituted alkyls,

C₃₋₈ substituted cycloalkyls, aryls, substituted aryls, aralkyls, C₁₋₆ heteroalkyls, substituted C₁₋₆ heteroalkyls, C₁₋₆ alkoxy, phenoxy, C₁₋₆ heteroalkoxy,



wherein

B₄ is a leaving group;

G is a polymer residue;

Y₁₋₂ are independently O, S, or NR_{11a};

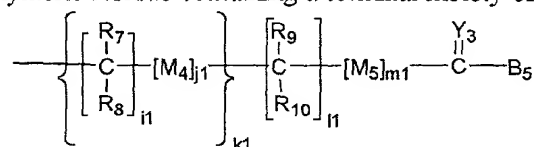
10 M₁₋₂ are independently O, S, or NR_{11b},

R₁₋₆, R₉ and R₁₀ are independently selected from the group consisting of hydrogen, C₁₋₆ alkyls, C₃₋₁₂ branched alkyls, C₃₋₈ cycloalkyls, C₁₋₆ substituted alkyls, C₃₋₈ substituted cycloalkyls, aryls, substituted aryls, aralkyls, C₁₋₆ heteroalkyls and substituted C₁₋₆ heteroalkyls;

15 a, b, c, d₁-g₁ and d₂-g₂ are each independently zero or a positive integer, whereby a polymeric conjugate is formed.

16. A method of preparing a polymeric transport system, comprising:
reacting a biologically active moiety containing an unprotected amino or

20 hydroxyl group with polymeric residue containing a terminal moiety of the formula:



wherein:

Y₃ is O, S, or NR_{11a};

25 R₇₋₁₀ and NR_{11a} are independently selected from the group consisting of hydrogen, C₁₋₆ alkyls, C₃₋₁₂ branched alkyls, C₃₋₈ cycloalkyls, C₁₋₆ substituted alkyls, C₃₋₈ substituted cycloalkyls, aryls, substituted aryls, aralkyls, C₁₋₆ heteroalkyls and substituted C₁₋₆ heteroalkyls;

M_{4,5} are independently O, S, or NR_{11b},

30 B₅ is a leaving group capable of reacting with an unprotected amino or

hydroxyl group of a biologically active moiety; and
 $i1-m1$ are each independently zero or a positive integer,
whereby a polymeric conjugate is formed.

5 17. A method of treatment, comprising:
administering to a mammal in need of such treatment an effective amount of a
compound of claim 1, wherein B is a residue of a biologically active moiety.

 18. A method of treatment, comprising:
10 administering to a mammal in need of such treatment an effective amount of a
compound of claim 3, wherein B is a residue of a biologically active moiety.